

ORIGINAL

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

In the Matter of

Amendment of the Commission's Rules
To Establish Rules and Policies
Pertaining to a Mobile-Satellite
Service in the 1610-1626.5/
2483.5-2500 MHz Frequency Bands

CC Docket No. 92-166

DOCKET FILE COPY ORIGINAL

To: The Commission

CONSOLIDATED OPPOSITION AND COMMENTS
CONCERNING PETITIONS FOR RECONSIDERATION

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SUMMARY

TRW supports the majority of the service rules and policies adopted by the Commission in this docket. The most important steps that the Commission should now take are to: (1) reject AMSC's assertion that its new nongeostationary system proposal is entitled to concurrent consideration with the other remaining applicants, and (2) make clear that geostationary use of these bands has been rejected on fundamental public interest grounds, which preclude geostationary operations except where such operations will not affect in any way current or potential LEO MSS system capacities.

AMSC's unsupported technical claims concerning the comparative utility and benefits of LEO and geostationary satellite operations in these bands have been fully evaluated and appropriately rejected, and its original geostationary proposal no longer exists -- it has been replaced with the new nongeostationary proposal. In this last regard, AMSC's notion that it is entitled to "full rights" as a deferred applicant is fundamentally wrong. As an applicant that has chosen to defer its financial qualification showing, it has already taken advantage of a special break accorded it by the Commission, as an alternative to dismissal of applicants that have not demonstrated financial qualification. It may have some priority over any future applicants, but not equality with applicants that have already demonstrated compliance with the rules.

Moreover, as a policy matter, the Commission must not permit AMSC to amass additional spectrum for a system that may never be completed. Allowing AMSC access to this spectrum for a geostationary system on anything other than a stringent, non-interference, "no effect on ultimate capacity" basis is the only course consistent with long-standing FCC policies against-spectrum warehousing and with the goal of full MSS competition.

Apart from clarifying that there is a very high hurdle for any geostationary use of the 1.6/2.4 GHz MSS bands, the Commission should largely affirm the service rules it has adopted, except where the current formulation fails to provide licensees with necessary certainty. In particular, the Commission should condition each 1.6/2.4 GHz MSS license upon a requirement that the licensee may not enter into any exclusive arrangements with any foreign government or operating entity. TRW agrees with Motorola that given the global coverage requirement adopted by the Commission, it is only reasonable for the Commission to take steps available to it to foster the ability of licensees actually to provide services globally.

On the other hand, TRW strongly disagrees with Motorola's self-serving suggestion that the Commission alter its current approach to establishment of any emissions mask between the CDMA Bands and the FDMA/TDMA Bands. The Commission's decision that it will look to the Table of Allocations to resolve any dispute that cannot be resolved by the parties is sound and appropriate, and should not be altered.

There is also no need for the Commission to alter its renewal filing window procedures. To the extent that other petitioners seek reconsideration of this rule, they appear to be confused concerning its impact. A pre-defined filing window for licensees does not, as LQP contends, prevent licensees from upgrading satellites by filing minor modifications to their existing authorizations at any time -- provided that they demonstrate continued compatibility with other licensed systems. The Commission also should reject LQP's illogical suggestion that milestones begin upon issuance of a conditional license, and reaffirm that milestones will be counted from the date that an unconditional license with associated feeder link spectrum is granted.

Finally, some changes in the interservice sharing rules are warranted, which TRW described in its initial Petition. In its own Petition, Constellation has also endorsed similar revisions, including removing inappropriate references to space stations in newly adopted Section 25.203(k), to comport with the conclusions of the MSS Above 1 GHz Negotiated Rulemaking Committee, and confirming that 1.6/2.4 GHz MSS systems that comply with the e.i.r.p. limits of ITU Radio Regulation 731E need not provide any additional interference protection.

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To: The Commission

**CONSOLIDATED OPPOSITION AND COMMENTS
CONCERNING PETITIONS FOR RECONSIDERATION**

TRW Inc. ("TRW"), by its attorneys and pursuant to Section 1.429 of the Commission's Rules,^{1/} hereby opposes the Petition for Reconsideration filed by AMSC Subsidiary Corporation ("AMSC") concerning the Commission's Report and Order in the above-captioned docket, FCC 94-261 (released October 14, 1994) ("R&O"). TRW also comments upon, and supports or opposes particular aspects of, petitions for reconsideration filed in this docket by Constellation Communications, Inc. ("Constellation"), Loral/Qualcomm Partnership, L.P. ("LQP"), and Motorola Satellite Communications, Inc. ("Motorola"). Although areas of disagreement remain among the parties, dramatic progress has been made toward resolving the conflicts that initially existed in this proceeding, and the Commission should be able to commence licensing systems based upon the timetable set forth in the R&O.

^{1/} See 47 C.F.R. § 1.429 (1993).

I. Background

The Commission's adoption of the R&O on October 14, 1994 was the culmination of a nearly four year process beginning with the filing of six different proposals to offer mobile satellite service ("MSS") in the frequency bands at 1610-1626.5 MHz and 2483.5-2500 MHz (the "1.6/2.4 GHz bands"), which were previously allocated to the Radiodetermination Satellite Service ("RDSS"). Each of the applicants proposed technological approaches for use of this spectrum that were distinct from the others, creating the likelihood that some or all of the applications would be mutually exclusive.

In order to study the ability of the applicants to share, as well as to seek an optimal solution to spectrum sharing based upon the facts gathered, the Commission chartered a Negotiated Rule Making Committee ("NRM Committee") to deliberate concerning the achievable means of authorizing as many applicants as possible in the bands, consistent with the public interest in achieving spectrum-efficient use and competitive multiple entry. Several proposals emerged for resolving the sharing issues raised, but none which could accommodate all applicants. Faced with the need to establish limiting criteria upon which to base licensing procedures in these bands, the Commission proposed in the Spring of 1994 to adopt rules that would divide the band between the two types of access technologies advanced, while imposing both domestic and global coverage standards for systems, and requiring that systems employ non-geostationary ("non-GSO or "LEO") satellites.

While an ideal solution might have included a means of permitting all of the applicants to access the 1.6/2.4 GHz bands, such a goal proved unachievable. The

limiting criteria that have now been adopted ensure that use of the allocated bands will be optimized. One of the by-products of the equitable service rules solution struck by the Commission is that the initial proposal of one applicant, AMSC, must be rejected as non-compliant. As the Commission described in the R&O, however, this is the best and most reasonable accommodation available to the Commission in order to establish useful new service, and fulfill the Commission's statutory mandate to encourage both the development of new technologies and the commercial application of these technologies to spur economic growth.

Moreover, the Commission's solution does not wholly preclude AMSC from making some use of these bands. AMSC could conceivably operate under something akin to its initial proposal so long as it demonstrates that it would not cause interference to or otherwise affect the capacity levels of the other authorized users of the bands. More importantly, however, even if AMSC is wholly excluded from these bands, it already has exclusive access to sufficient spectrum in other bands in order to provide MSS. The multiple systems licensed in the 1.6/2.4 GHz MSS bands will ultimately provide users with a much-needed competitive alternative to this otherwise monopoly service.

II. The Commission Must Not Permit AMSC To Pursue Its Conflicting Proposals For Use Of The 1.6/2.4 GHz MSS Bands.

A. AMSC Is Procedurally Barred From Becoming A LEO System Applicant In The Current Processing Group.

In the R&O, the Commission stated that it would permit application amendments that would bring pending applications for the 1.6/2.4 GHz MSS bands into compliance with the newly adopted service rules. The Commission stated that "a

change from a GSO system configuration to a LEO system configuration to meet our satellite system design requirement . . . would be permitted without affecting a particular application's status in this processing group."^{2/} The apparent intent of this statement was to announce that all "applicants" for authorizations in the 1.6/2.4 GHz MSS bands, including AMSC, would be permitted to amend.

As TRW pointed out in its own "Petition for Partial Reconsideration and Clarification," however, *AMSC did not have a system application pending* for the 1.6/2.4 GHz bands at the time the R&O was released, but rather held a system license in the upper L-band and had filed multiple modification applications for proposed expansion frequencies for this system, including the one for a portion of the 1.6 GHz bands.^{3/} Unlike the other pending applicants, AMSC's petition for rulemaking simply sought allocation of this L-band spectrum for domestic geostationary ("GSO") MSS,^{4/} and its concurrently filed application sought modification of its permit to allow use of these frequencies as part of AMSC's previously authorized system.

The Commission has rejected AMSC's suggested approach outright. It determined that the 1.6/2.4 GHz bands may not be used for AMSC-type GSO MSS except, at most, on a strictly non-interfering basis, and instead allocated this spectrum

^{2/} R&O, FCC 94-261, slip op. at ¶ 59 (emphasis added).

^{3/} See AMSC Petition for Reconsideration, CC Docket No. 92-166, at 2 (filed November 21, 1994 ("AMSC Petition")) ("AMSC filed an application in 1991 to add the bands at issue in this proceeding to AMSC-2 and AMSC-3, two GSO satellites that are authorized as part of AMSC's domestic MSS system"). See also TRW Petition for Partial Reconsideration and Clarification, CC Docket No. 92-166, at 5-6 (filed November 21, 1994) ("TRW Petition").

^{4/} Indeed, AMSC sought only a 10.5 MHz portion of the L-band spectrum, in addition to not seeking any of the S-band spectrum.

for a new service -- global LEO MSS. AMSC, rather than modify the proposal it initially filed in order to comply with the Commission's new 1.6/2.4 GHz MSS service rules, has instead submitted an entirely new system application to provide an entirely different service (LEO MSS), maintaining that this new application is a permissible "amendment." AMSC's application, however, bears almost no relationship to its GSO MSS system and its original application to modify that authorization. Moreover, as Motorola points out in its Petition, AMSC cannot suggest that any of the alleged benefits it once claimed for the proposed addition of new L-band MSS spectrum for use by its "wing" satellites under its existing authorization could be realized under the Commission's adopted rules and the new LEO system application that AMSC has filed thereunder.^{5/}

Under both the Commission's rules and applicable precedent, AMSC cannot bootstrap its domestic GSO MSS modification application into a full-fledged international LEO MSS system application. Regardless of the fact that the Commission may have intended to provide AMSC some opportunity to conform its initial proposal to the 1.6/2.4 GHz MSS rules, the actual system proposal filed by AMSC not only fails to conform that proposal, it abandons it entirely.^{6/}

The Commission's Satellite Rules explicitly provide that an application will be treated as newly filed if an amendment "changes the frequencies or orbital locations to be used" or if the "cumulative effect of the amendment" is determined to

^{5/} See Motorola Petition for Clarification and Partial Reconsideration, CC Docket No. 92-166, at 22 (filed November 21, 1994) ("Motorola Petition").

^{6/} See TRW Petition at 6.

be "substantial."^{7/} Even if the Commission reasonably determined that AMSC should be permitted to alter the orbital characteristics of its system to adopt some use of LEO architecture, it was silent as to changes in frequency bands or the adoption of an entirely new system designed to provide a different type of service.^{8/}

The Commission has consistently held on prior occasions that extensive material changes to systems must be treated as new applications, even in the context of systems that have already been granted permits.^{9/} To the extent that the Commission intended to permit AMSC to convert its domestic GSO system modification application into an application for an entirely distinct international LEO MSS system, the decision is in error under FCC rules and precedent. AMSC is not eligible to participate in the current processing group, even as a deferred applicant.

AMSC, nonetheless, seeks not only to perform the above-described feat of substituting an entirely new international system application in the place of a modification request pertaining to a domestic system, it also, incredibly, seeks to pursue simultaneously its original domestic GSO proposal through its Petition for Reconsideration. AMSC simply cannot play its cards two ways -- it cannot pursue a half-hearted LEO application in order to show "its interest in remaining in the current

^{7/} See 47 C.F.R. § 25.116 (b) & (c) (1993).

^{8/} See also footnote 4, supra.

^{9/} See Geostar Positioning Corp., 6 FCC Rcd 2276, 2278 (1991) (declining to permit Geostar to seek authorization for "a completely different system" under "the guise of a modification application").

processing group for the frequency bands at issue,"^{10/} while "[a]t the same time" continuing "in the alternative to try to convince the Commission to permit AMSC to access at least a portion of the bands as part of AMSC's domestic GSO system."^{11/} Whether or not AMSC's "amendment" is ultimately held acceptable, the mere fact of its filing necessarily extinguishes the original GSO proposal that it "amended." In other words, when AMSC altered its June 1991 application for the AMSC-2 and AMSC-3 satellites to specify an entirely new, non-GSO system, it no longer had an application pending to add spectrum at 1.6 GHz to the two GSO satellites. If AMSC were to file a new GSO MSS application to add spectrum to AMSC-2 and AMSC-3, it would necessarily be subject to competing applications. For this reason, with respect to AMSC's participation in the current processing group, its petition for reconsideration of the Commission's decision to limit the 1.6/2.4 GHz MSS to non-GSO satellite is moot.

With regard again to AMSC's assertions concerning its non-GSO proposal, AMSC's notion that it should be entitled to "full rights" as a deferred applicant is fundamentally wrong.^{12/} As an applicant that has chosen to defer its qualification showing, AMSC has already taken advantage of a special break accorded it by the Commission, which would permit AMSC to retain an advantage over potential future applicants for the 1.6/2.4 GHz bands despite the fact that its LEO

^{10/} Letter from Brian B. Pemberton, President, AMSC, to William F. Caton, Secretary, FCC, dated November 16, 1994.

^{11/} Id.

^{12/} AMSC Petition at 13-14.

application is incomplete.^{13/} The alternative, in the absence of such a special dispensation, is for the Commission to dismiss AMSC's application based on AMSC's failure to demonstrate its qualifications to be a licensee.^{14/} Because no prejudice results to an applicant whose application is properly dismissed for failure to comply fully with Commission rules, there can be no prejudice in considering in a separate processing group an applicant that is affirmatively provided, in the alternative, with additional time to demonstrate its fitness. See Aeronautical Radio, Inc. v. FCC, 928 F.2d 428, 438 (D.C. Cir. 1991).^{15/}

B. The Record In This Docket And Applicable Commission Precedent Supports Imposition Of A Very High Hurdle For Any GSO Use Of These Bands.

To the extent that AMSC continues to advance its claims regarding the supposed attributes of GSO technology, its Petition for Reconsideration is without merit; indeed, it is directly contradicted by the record painstakingly established in this

^{13/} There can be no question that AMSC acted with full knowledge of the risk to its application in determining that it would not submit a financial showing, as its states in its petition that it is "concerned about the Commission's apparent decision to put at a potential disadvantage applicants that defer their financial showing until January 1996." AMSC Petition at 13.

^{14/} Indeed, AMSC appears to argue for dismissal of its application in suggesting that all current applicants "must be licensed or dismissed together." AMSC Petition at 14.

^{15/} AMSC is necessarily familiar with the fact that "the Commission may adopt rules in the public interest establishing licensing eligibility criteria which effectively preclude a hearing under Section 309(e) for those applicants who do not satisfy the prescribed eligibility requirements." Amendment of Parts 2, 22 and 25 of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services (Final Decision on Remand), 7 FCC Rcd 266, 273 (1992) ("AMSC Final Grant") (subsequent history omitted) (citing United States v. Storer Broadcasting Co., 351 U.S. 192 (1956)).

proceeding. As described above, the Commission's rules are soundly premised on the distinct service advantages that can be secured through implementation of LEO technology, including reduction of transmission time delay, the provision of truly global coverage, and the ability to offer service to hand-held transceivers.^{16/}

AMSC offers nothing new in its effort to dissuade the Commission from proceeding with the approach it has adopted. Instead, AMSC simply restates many of the same unsupported arguments that the Commission has already found unpersuasive.^{17/} In the absence of any significant new information upon which the Commission might base a change in its earlier well-founded conclusions, the Commission has no reason to change the sound conclusions it previously reached.

As LQP notes, the Commission expressly adopted a LEO requirement for these bands based upon the considerable public interest benefits of employing this technology, and expressly rejected arguments by AMSC and others that advocated

^{16/} See R&O, FCC 94-261, slip op. at ¶¶ 15-17. See also TRW Comments, CC Docket No. 92-166, at 17-25 (filed May 5, 1994) ("TRW Comments"); TRW Reply Comments, CC Docket No. 92-166, at 6-20 (filed June 20, 1994) ("TRW Reply Comments").

^{17/} To the extent that AMSC cites recent items from the trade press, they fail to advance its arguments. For example, to support the purported ability of GSO satellites to provide nearly global coverage, AMSC cites an article that describes Inmarsat's recent logging of a new record for the most extreme northern communication via one of its GSO satellites -- from 80° north latitude. See AMSC Petition at 9 and n.29. AMSC does not mention, however, that this communication was initiated from a Samsonite-sized luggage phone which could be used only during about one-third of the day, under optimal conditions. See Mark Blanchard, The Iceman Cometh, the Iceman Goeth, "America's NETWORK," May 1, 1994, at 15-16. This capability falls far short of the Commission's desire to promote service to hand-held telephones and, more importantly, its explicit requirement that service be available "for at least 75 % of every 24-hour period." See FCC Rule § 25.143(b)(2)(ii).

GSO use of the subject frequency bands.^{18/} This approach is entirely consistent with the Commission's past actions in analogous situations in which it has rejected non-conforming applicants in order to promote an optimal service solution that advances the public interest.

As both TRW and LQP point out in their petitions, in the very decision that affirmed AMSC's license for domestic MSS in the 1545-1559 MHz and 1645.5-1660.5 MHz bands, the Commission rejected a LEO proposal on the ground that a GSO system would better serve the public interest in the bands then at issue.^{19/} The Commission then explicitly noted that it was actively pursuing allocations in other bands for LEO satellite service.^{20/}

Having made the judgment to exclude LEO systems from certain bands to promote optimal conditions for GSO coordination, the Commission ought not now burden the efficiency of LEO system operations by failing to properly limit GSO systems.^{21/} In this respect, the Commission must clarify the meaning of its statement that no GSO user may "cause interference to or affect LEO

^{18/} See LQP Petition for Clarification and Partial Reconsideration, CC Docket No. 92-166, at 6 (November 21, 1994) ("LQP Petition"); R&O, FCC 94-261, slip op. at ¶ 19 (demonstrated capabilities of GSO technology "are not sufficient to preclude embracing a new and potentially more efficient technology, notwithstanding its substantial risks and costs").

^{19/} See AMSC Final Grant, 7 FCC Rcd at 273.

^{20/} Id.

^{21/} LQP is correct in warning that the authorization of any GSO system could undermine the Commission's decision to adopt LEO technology to secure the unique benefits that this technology offers. See LQP Petition at 8.

operations."^{22/} At a minimum, TRW believes that the Commission must answer LQP's legitimate concerns by limiting non-compliant GSO systems to proposals that affirmatively demonstrate that they will not in any way interfere with, or limit the potential system capacity of, the primary MSS system operators.^{23/} In other words, GSO operation in the LEO bands, whether MSS or RDSS, must be invisible to the primary LEO operators at all stages of their systems' development -- i.e., it must be fully "secondary" as that term is used in Part 2 of the Commission's rules.^{24/} The burden must be placed upon any applicants that seek to employ such secondary uses of the spectrum to demonstrate that they will not limit primary operators. Any solution that permits GSO operations to disrupt, limit, or impact negatively in any way the ability of LEO systems to make full use of all allocated spectrum in the 1.6/2.4 GHz bands would be flatly inconsistent with the Commission's explicit conclusions endorsing the advantages of LEO technology and seeking to foster its successful implementation.^{25/}

^{22/} See R&O, FCC 94-261, slip op. at ¶ 20. See also LQP Petition at 8-9.

^{23/} See TRW Petition at 3.

^{24/} See 47 C.F.R. § 2.104(d) (1993).

^{25/} See LQP Petition at 10 ("An agency engages in arbitrary and capricious decisionmaking where its decisions undercut its own rules and policies."), citing Northwestern Indiana Telephone Co., Inc. v. FCC, 824 F.2d 1205, 1209 (D.C. Cir. 1987); Office of Communication of United Church of Christ, 779 F.2d 702, 714 (D.C. Cir. 1985).

C. AMSC Should Be Excluded From Anything Other Than Fully Secondary Use Of These Bands On Policy Grounds.

Finally, policy considerations applicable to AMSC, though not explicitly cited by the Commission, provide additional compelling justifications for precluding AMSC from gaining access to these bands except on the very limited basis described in the preceding section. AMSC's persistent attempts to secure access to "at least a portion of the 1.6/2.4 GHz band"^{26/} bespeak an apparently insatiable demand for additional spectrum -- AMSC has applied for almost every available MSS frequency in the L-band, as well as for some bands that are not yet available.^{27/} This demand persists, based on alleged "need," despite the fact that AMSC has not yet launched a single satellite to make use of the 33 MHz of spectrum in which it is currently authorized to operate as a monopoly service provider.^{28/} The Commission must not permit AMSC to continue amassing spectrum for a system or systems that apparently may never be completed.^{29/}

^{26/} AMSC Petition at 7.

^{27/} See Application of AMSC, FCC File No. 59-DSS-MP/ML-93 (AMSC applies for frequencies in lower L-band, for which the Table of Allocations has been modified to include MSS on a primary basis, despite the existence of an application freeze for these bands). See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum for Mobile-Satellite Services in the 1530-1544 and 1626.5-1645.5 Bands (NPRM), 5 FCC Rcd 1255, 1259 (1990) (Commission announces that applications would not be solicited for these bands "until rules and policies are finalized"). Through another subsidiary, AMSC has sought spectrum in the 2 GHz bands. See Application of Personal Communications Satellite Corporation (filed April 7, 1994).

^{28/} See also Constellation Petition for Reconsideration, CC Docket No. 92-166, at 3 (filed November 21, 1994) ("Constellation Petition").

^{29/} The Commission's rules and policies concerning domestic satellites, for example,
(continued...)

Moreover, allowing AMSC access to spectrum in the 1.6/2.4 GHz bands that limits in any way the potential use by LEO systems is inconsistent with full MSS competition. As noted both above and by other petitioners for reconsideration,^{30/} AMSC already has been granted access on an exclusive basis to as much spectrum as all of the other applicants in this proceeding will be required to divide and share in the 1.6/2.4 GHz bands. AMSC also applied for exclusive use of an additional 28 MHz of spectrum in the lower L-band that was recently reallocated to the MSS.^{31/} If, as AMSC claims in its own Petition, it is poised to begin service in the coming year on one satellite,^{32/} it will have a several year head start over the 1.6/2.4 GHz applicants in providing MSS service.

TRW agrees with Motorola's observation that the encouragement of fair and equal competition is a consideration that the Commission must weigh as a significant aspect of its statutory mandate to serve the public interest. See Motorola Petition at 19-21.^{33/} In order to facilitate the advent of intermodal competition in

^{29/} (...continued)

require applicants seeking expansion capacity "to demonstrate that existing satellites are 'essentially filled' before additional in-orbit satellites are authorized." Licensing Space Stations in the Domestic Fixed-Satellite Service, 1 FCC Rcd 682, 685 (1986); 47 C.F.R. § 25.140(g) (1993). This same principle should be applied to AMSC here -- i.e., the Commission should not permit AMSC to expand its spectrum use when it has not maximized, and in fact has not even commenced service with, its existing resources.

^{30/} See Motorola Petition at 19-21; Constellation Petition at 3-4.

^{31/} See Constellation Petition at 4; see also footnote 27, supra.

^{32/} See AMSC Petition at 2.

^{33/} Citing FCC v. RCA Communications, Inc., 346 U.S. 86, 93 (1953); ITT World Communications, Inc. v. FCC, 725 F.2d 732, 747 n.33 (D.C. Cir. 1984).

the MSS market -- intramodal competition is assured by the multiple entry sharing plan that the Commission adopted in the R&O -- the Commission should either preclude AMSC from gaining any access to the 1.6/2.4 GHz bands, or should strictly limit such access so that AMSC's use cannot in any way inhibit the development of robust MSS competition among the primary LEO system operators in these bands and between this type of service and AMSC. For its part, TRW believes the former approach is preferable.

III. The Commission Should Both Affirm Existing Service Rules That Promote Regulatory Certainty For Licensees And Adopt Additional Safeguards Promoting This Goal.

A. The Commission Should Not Alter Its Current Compromise Approach To Establishment Of Any "Emissions Mask" Between The CDMA Bands And The FDMA/TDMA Bands.

Although TRW finds itself in uncommon agreement with Motorola on several significant issues at this juncture of this proceeding, it strongly disagrees with Motorola's continuing attempt to secure unwarranted protection for its secondary downlinks in the L-band portion of the spectrum allocation.^{34/} Motorola has known at least since early 1992 that downlink use was, and was likely to remain, a secondary allocation for these bands. There is no justification for arbitrary alteration of this circumstance in this proceeding to accommodate a non-conforming use when the majority of the applicants propose to use the L-band in a manner that is consistent with the primary Earth-to-space allocation.^{35/}

^{34/} See Motorola Petition at 15-16.

^{35/} See TRW Reply Comments at 65-68.

Indeed, TRW believes that the Commission's initial conclusion on this issue is the optimal resolution, leaving the door open for the parties "to negotiate a guardband agreement once the technical parameters of their amended systems are finalized."^{36/} The Commission made clear that it would not object to a reasonable accommodation among the parties. To the extent that Motorola desires Commission resolution of this issue, however, the Commission properly declared that any involvement by it in resolving this issue "will look to the Table of Frequency Allocations to determine where any operational constraints are appropriately placed."^{37/}

On a somewhat related point, TRW also strongly disagrees with Motorola's attempt to shift to CDMA systems the entire burden of any interim constraint upon MSS use of the L-band spectrum above 1610 MHz, if such limitation is ultimately required.^{38/} TRW agrees with the Commission and LQP^{39/} that if GLONASS receivers are protected in the United States to an extent that limits MSS use of this spectrum, then all 1.6/2.4 GHz MSS licensees must share equitably the burden of this impairment. The Commission's current interim plan strikes an equitable balance.^{40/}

^{36/} R&O, FCC 94-261, slip op. at ¶ 63.

^{37/} Id.

^{38/} See Motorola Petition at 10.

^{39/} See LQP Petition at 18-19.

^{40/} See R&O, FCC 94-261, slip op. at ¶¶ 49-53.

B. The Commission Should Condition 1.6/2.4 GHz MSS Licenses To Prohibit Licensees From Entering Into Any Preferential Arrangements With Foreign Entities.

Motorola concurs with TRW and the other parties to the Joint Proposal that the Commission must prohibit 1.6/2.4 GHz MSS licensees from seeking or obtaining any exclusive arrangements or special concessions for the provision of service in foreign countries.^{41/} Motorola adds that a failure to establish this prohibition would depart from the Commission's previous exercise of its statutory authority to place conditions on licenses under Sections 308(c) of the Communications Act of 1934, as amended (the "Act").^{42/}

Motorola is correct that the Commission has used its authority under the Act to place conditions on licenses that "prohibit both Title III international satellite licensees and cable landing licensees from acquiring rights that are denied abroad to other U.S. entities."^{43/} Furthermore, as TRW has stated, the Commission has not hesitated to impose limiting conditions on U.S. space station licenses regardless of whether those conditions flowed through to ultimate end users or of where those end

^{41/} See Motorola Petition at 16-18; TRW Reply Comments at 58-60; TRW Petition at 21-23; Joint Proposal and Settlement Agreement, CC Docket No. 92-166, at § 7(e) (filed September 9, 1994).

^{42/} See Motorola Petition at 16-18. See also 47 U.S.C. § 35.

^{43/} Id. at 17. See, e.g., Orion Satellite Corp., 8 FCC Rcd 4937, 4942 & n. 27 (1990) (conditioning satellite system license on prohibition of any arrangement granting rights to the licensee to handle traffic to or from the United States, to construct or operate space segment or earth stations or to interchange traffic that are denied to any other U.S. company); Optel Communications, Inc., 8 FCC Rcd 2267, 2272 (1993) (imposing similar conditions on license to land and operate submarine cable).

users were located.^{44/} TRW agrees with Motorola that given the global coverage requirement that the Commission will impose on such licensees, a prohibition on exclusive arrangements for the provision of service by 1.6/2.4 MHz MSS licensees in foreign countries is eminently reasonable.^{45/}

It is incumbent upon the Commission to act now to prevent the inevitable disputes and litigation that will result if 1.6/2.4 GHz MSS system licensees are free to seek or accept preferential treatment for their satellite systems from foreign entities and administrations. True competition, and the benefits it offers to American consumers and to the world, will only come to be in the 1.6/2.4 GHz MSS industry if all U.S. licensees have access to foreign markets on equal terms.

C. There Is No Need For The Commission To Modify Its Renewal Filing Window Procedures.

The Commission has adopted a filing window procedure for submission of renewal applications by 1.6/2.4 GHz MSS licensees.^{46/} In their petitions, several parties suggest that this sensible, uniform procedure requires change.^{47/} In

^{44/} See TRW Reply Comments at 59 & n.90; TRW Petition at 22-23; International Separate Systems, 101 F.C.C.2d 1046, 1111 (1985) (subsequent history omitted) (conditioning all international separate satellite system licenses on absolute prohibition of any interconnection of the systems to the public switched telephone network, and applying that prohibition to associated ground station and service authorizations whether held by separate satellite system operators, their customers or the ultimate user).

^{45/} See Motorola Petition at 18.

^{46/} See R&O, FCC 94-261, slip op. at ¶ 186; FCC Rule § 25.120(e).

^{47/} See Motorola Petition at 18-19; LQP Petition at 19-22; and Constellation Petition at 6-9).

TRW's view, however, none of the petitioners has offered a reasonable justification for altering the Commission's approach.^{48/}

LQP expresses concern that the "pre-defined window" fails to account for "the schedule under which second-generation systems will need to be processed" given the fact that some applicants propose satellites with life-spans that are not co-extensive with the license term, and may wish to incorporate technical improvements in next-generation satellites.^{49/} TRW believes that LQP is promoting a solution to a problem that does not exist. The Commission's rule does not deal with or in any way limit the submission of applications for minor system modification, which most applicants are likely to seek at some point during their license term to accommodate technical improvements that inevitably occur as systems are developed and deployed.^{50/} Contrary to LQP's apparent perception, applicants will be freely able to make minor modifications to their systems based on a showing of continued compatibility with other authorized systems.^{51/} These modifications, in turn, will become part of the system license ultimately subject to renewal. Thus, LQP's complaint that it will be "forced to launch and operate technically inferior satellites" is

^{48/} Nevertheless, TRW believes that Motorola's proposed clarification is not inconsistent with the Commission's intent. See Motorola Petition at 19. See also nn. 53-54, infra, and accompanying text.

^{49/} LQP Petition at 19.

^{50/} The Commission's "technically identical" requirement applies to replacement satellites that the licensee may construct and launch without seeking a modification of its license. See R&O, FCC 94-261, slip op. at ¶ 182.

^{51/} See FCC Rule § 25.143(b)(2)(iv).

misplaced;^{52/} it does not need to seek authorization for an entirely new system in order to upgrade its satellite design.

On the other hand, to the extent that a permittee may wish to apply for a "second-generation system," or make some other major modification, the renewal filing window also poses no barrier.^{53/} The concept of a "second-generation" system is distinct from renewal, as any new application or application for a major change in an authorization must necessarily trigger a new processing round with the acceptance of other applications. Thus, if a permittee desires a major modification, to implement a second-generation system, e.g., adding new frequencies -- as distinct from a minor modification, discussed above -- then it may file it at any time, and need not wait to file during a renewal filing window.^{54/} For this reason, there is clearly no need to accelerate renewal filings in response to other system applications, either renewal or new, as suggested by Constellation.^{55/} A system licensee that believes it is infringed upon by a new proposal may petition to deny the application, if appropriate, or may file its own application to be processed concurrently. e.g., to access the same newly available spectrum.

^{52/} See LQP Petition at 21.

^{53/} Cf. Motorola Petition at 19.

^{54/} Id.

^{55/} Cf. Constellation Petition at 7-9.